

U.S. Department of Transportation
Federal Aviation Administration

Subject: INFORMATION: Policy Statement with respect to use of Industry Standards in Seat Certification	Date: May 30, 2001
From: Manager, Transport Airplane Directorate, Standards Staff, ANM-110	Reply to 01-115-32 Attn. of: Regulatory Reference: §§ 25.601,25.785
To: SEE DISTRIBUTION LIST	

This memo discusses the use of industry standards to address certain certification issues for Transport Airplane Seats.

Current Regulatory and Advisory Material

The basic certification requirements for seats are contained in § 25.785 of the FAR. In addition, Technical Standard Orders C39 and C127 make reference to specifications that govern more detail design features of the seat. These specifications typically contain both required and recommended practices with respect to design details. By virtue of their nature as an industry standard, the ramifications of not following them are unacceptable from a liability standpoint, unless an alternative approach is proposed and accepted.

Relevant Past Practice

In general, the FAA does not address each seat component in a separate certification plan, with respect to compliance with part 25. Detail design features are usually addressed through industry standards which, when adhered to, provide an acceptable means of compliance, and are covered by the seat design approval itself. For example, seat foodtrays are required to be non-injurious under § 25.785, but the FAA would not typically expect special certification data to show this. In fact, there are industry standards that address foodtray design, and these have been shown to be sufficient.

Several years ago, when in-arm video systems were first installed on seats, there was concern that these items not introduce injurious features or reduce occupant safety. At that time, there were a variety of designs, and the potential for occupant injury during flight, or other phase of operation needed to be addressed. The practice of assessing the video monitor and deployable arm for potential injury was introduced, and included an assessment of an "abuse load" to ensure that the arm would not fail in a hazardous manner, should it be loaded by an occupant moving about the cabin. These assessments were conducted above and beyond the process for approving the seat itself.

Policy

More recently, the Society of Automotive Engineers has issued an Aerospace Recommended Practice (ARP) that addresses video system abuse load testing. This document, ARP 5475, represents the industry recommendation for making an assessment of the injury potential for a video system, and is an acceptable means of addressing this feature. With the issuance of the this ARP, the Transport Airplane Directorate considers that qualification of the seat itself using that document is sufficient to show compliance with the FAR with respect to the in-arm video monitor. That is, the in-arm video may be treated the same way as are other seat features. Based on successful experience with design features qualified in accordance with

industry standards, we believe that this will simplify the certification process with no adverse effect on safety.

Effect of Policy

The general policy stated in this document is not intended to establish a binding norm; it does not constitute a new regulation and the FAA would not apply or rely upon it as a regulation. The FAA Aircraft Certification Offices (ACO) that certify transport category airplanes should generally attempt to follow this policy, when appropriate; but in determining compliance with certification standards, each ACO has the discretion not to apply these guidelines where it determines that they are inappropriate. Applicants should expect that the certifying officials will consider this information when making findings of compliance relevant to new certificate actions. Also, as with all advisory material, this statement of policy identifies one means, but not the only means, of compliance. Any questions related to this policy may be directed to Jeff Gardlin at (425) 227-2136.

Original signed by

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